COPY OF PAPERS ORIGINALLY FILED

DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)



OR Submitted after Initial
Filing (surcharge (37
CFR 1.16(e)) required)

| Attorney Docket Number | UCAL199 | |
|------------------------|-------------------|-------------|
| First Named Inventor | Akeson et al. | |
| COMPLI | ETE IF KNOWN | |
| Application Number | 09/990,102 | |
| Filing Date | November 21, 2001 | |
| Group Art Unit | N/A | |
| Examiner Name | N/A | |

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHODS AND DEVICES FOR CHARACTERIZING DUPLEX NUCLEIC ACID MOLECULES

| the specification of which: |
|-----------------------------|
|-----------------------------|

is attached hereto

OR

X was filed on November 21, 2001 as United States Application Number 09/990, 102.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined by 37 CFR 1.56.

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| (MM/DD/YYYY) | | YES | NO | | |
|-------------------------------|--|---|---|--|--|
| | | | | | |
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| tates provisional application | n(s) listed below. | | | | |
| F | Filing Date (MM/DD/YYYY) | | | | |
| · | November 27, 2000 | | | | |
| es application(s), or 365(c) | of any PCT inter | national applica | tion(s) | | |
| | | Parent Patent Number (if applicable) | | | |
| | es application(s), or 365(c) Parent Filing Date | November 27 es application(s), or 365(c) of any PCT inter | Filing Date (MM/DD/YYYY) November 27, 2000 es application(s), or 365(c) of any PCT international applica Parent Filing Date Parent Patent N | | |

Atty Dkt No. IICAI -199

| | DIR | ECT ALL CORRESPO | NDENCE TO: | | | | | | |
|------------------|--------------------------------|------------------|--------------|-----------|--------------|--|--|--|--|
| Name | Bret E.Field | | | | | | | | |
| Address | BOZICEVIC, FIELD & FRANCIS LLP | | | | | | | | |
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| City, State, Zip | Menlo Park, CA 94025 | | | | | | | | |
| Country | U.S.A. | Telephone | 650-327-3400 | Facsimile | 650-327-3231 | | | | |

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon. Name of Sole or First Inventor: Given Name (first and middle [if any]) Family Name or Surname Akeson Mark Date 15/2002 Inventor's Signature **Citizenship** U.S.A. Residence: City State CA Country U.S.A. Santa Cruz / Post Office 300 Candy Lane Address City State Zip 95060 Country U.S.A. Santa Cruz CA Name of Second Inventor: Family Name or Surname Given Name (first and middle [if any]) Wenonah Vercoutere Date Inventor's Signature Citizenship Residence: City State Country U.S.A. CA U.S.A. Santa Cruz Post Office P.O. Box 5309 Address U.S.A. City Santa Cruz State CA. Zip 95063 Country Name of Third Inventor:

| Gi | iven Name (first and | middle [if | any]) | Family Name or Surname | | | | | |
|-------------------------|----------------------|------------|-------|------------------------|---------|----------|---------|-------------|--------|
| David | | | | | | Haussler | | | |
| Inventor's Signature | | | | | | | | Date | |
| Residence: City | Santa Cruz | | State | CA | Country | U.S.A. | | Citizenship | U.S.A. |
| Post Office Address | 402 Nobel Dr. | | | • | • | | | | |
| City | Santa Cruz | State | CA | Zip | 95060 | | Country | U.S.A. | |

| Name of Fourt | h Inventor: | | | | | | | | |
|-------------------------|----------------------|------------|-------|-------------|----------|--------|------------|--------------|--------|
| G | iven Name (first and | middle [if | any]) | | | F | Family Nam | e or Surname | |
| Stephen | | | | | Winters- | Hilt | | | |
| Inventor's Signature | | | | | <u></u> | | | Date | |
| Residence: City | Santa Cruz | | State | CA | Country | U.S.A. | | Citizenship | U.S.A. |
| Post Office Address | 209 Koshland | | - | | | | | | |
| City . | Santa Cruz | State | CA | Zip | 95064 | | Country | U.S.A. | |

DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

Declaration Submitted with

Declaration Submitted after Initial OR Filing (surcharge (37 CFR 1.16(e)) required)

| Attorney Docket Number | UCAL199 |
|------------------------|-------------------|
| First Named Inventor | Akeson et al. |
| COMPLE | ETE IF KNOWN |
| Application Number | 09/990,102 |
| Filing Date | November 21, 2001 |
| Group Art Unit | N/A |
| Examiner Name | N/A |

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I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHODS AND DEVICES FOR CHARACTERIZING DUPLEX NUCLEIC ACID MOLECULES

COPY OF PAPERS ORIGINALLY FILED

the specification of which:

is attached hereto

OR

was filed on November 21, 2001 as United States Application Number 09/990,102. _X_

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| Prior Foreign Application Number(s) | Country | Foreign Filing Date (MM/DD/YYYY) | Priority Not Claimed | Certified Cop | y Attached? |
|---|------------------------------|-------------------------------------|----------------------|---------------|--------------|
| · | | Day in a sample of | | YES | NO |
| | a | . ; | | | |
| I hereby claim the benefit under 35 U.S.C | C. 119(e) of any United Stat | es provisional application | n(s) listed below. | | |

| Application Number(s) | Filing Date (MM/DD/YYYY) |
|-----------------------|--------------------------|
| 60/253,393 | November 27, 2000 |
| | |

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application(s)

| designating the Officed States of America, fisted below. | | |
|--|------------------------------------|---|
| U.S. Parent Application or PCT Parent Number | Parent Filing Date (MM/DD/YYYY) | Parent Patent Number (if applicable) |
| | | |
| | | |
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| Mark | | | | | Akeson | | . . . | ., | |
| Inventor's Signature | | | | | | | | Date | |
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| | O.M. | en Name (first and m | iddle [if an | y]) | | | Family I | Name or Surname | |
|--|------------|----------------------|--------------|-------|------------------|----------|----------|-----------------|--------|
| Signature Residence: City Santa Cruz State CA Country U.S.A. Citizenship U | onah | | | | | Vercoute | re | | |
| | | | | | | 1 | | Date | |
| والمنافع والم | ence: City | Santa Cruz | | State | CA | Country | U.S.A. | Citizenship | U.S.A. |
| Post Office P.O. Box 5309 Address | | P.O. Box 5309 | •. | | . 72 - 7 , 7 - 7 | | | , <u></u> | |

| Name of Third | | | • | | | | | | |
|-------------------------|----------------------|--------------|---------------------------------------|------------------------|----------|--------|---------|-------------|--------|
| G | iven Name (first and | l middle [if | any]) | Family Name or Surname | | | | | |
| David | | | · · · · · · · · · · · · · · · · · · · | | Haussler | | | ·· <u> </u> | • |
| Inventor's Signature | | | | | | | | Date | |
| Residence: City | Santa Cruz | | State | CA | Country | U.S.A. | | Citizenship | U.S.A. |
| Post Office Address | 402 Nobel Dr. | | .1 | | | · | | *** | |
| City | Santa Cruz | State | CA | Zip | 95060 | C | Country | U.S.A. | |

| Name of Fourt | th Inventor: | | | | | | | | THE COLLEGE |
|--|--------------|-------|-------|-------|----------|--------|------------|---------------|-------------|
| Given Name (first and middle [if any]) | | | | | T | | Family Nam | ne or Surname | |
| Stephen | | | | | Winters- | Hilt | | | |
| Inventor's Signature | Steple | enWn | ntors | -gell | i i | | | Date 12/02 | 1/27/02 |
| Residence: City | Santa Cruz | | State | CA | Country | U.S.A. | | Citizenship | U.S.A. |
| Post Office Address | 209 Koshland | | - | | | | | | |
| City . | Santa Cruz | State | CA | Zip | 95064 | | Country | U.S.A. | |

DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

P Submitted with Initial Plans

OR

X_Declaration
Submitted after Initial
Filing (surcharge (37
CFR 1.16(e)) required)

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|------------------------|-------------------|--|
| First Named Inventor | Akeson et al. | |
| COMPLE | ETE IF KNOWN | |
| Application Number | 09/990,102 | |
| Filing Date | November 21, 2001 | |
| Group Art Unit | N/A | |
| Examiner Name | N/A | |

Dalowand inventor, I hereby declare that:

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the specification of which:

is attached hereto

OR

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| Prior Foreign Application No | mber(s) | Country | Foreign Filing Date (MM/DD/YYYY) | Priority Not Claimed | Certified Cop | py Attached? |
|------------------------------|---------|--|-------------------------------------|----------------------|-----------------|--------------|
| | | | | | YES | NO |
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| | | | | <u> </u> | <u> </u> | L |

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

| Application Number(s) | Filing Date (MM/DD/YYYY) |
|-----------------------|--------------------------|
| 60/253,393 | November 27, 2000 |
| | |

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application(s)

| U.S. Parent Application or PCT Parent Number | Parent Filing Date (MM/DD/YYYY) | Parent Patent Number (if applicable) |
|--|------------------------------------|---|
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OF PROFITED

| | | • | | | | | | Atty D | kt No. UCAL-199 |
|--|---|-----------------------|----------------|---------------|-------------|---------------|---------------|------------------|-----------------|
| <u> </u> | | DIRE | CT AI | LL CORR | ESPONI | ENCE T | O: | | |
| Name | Bret E.Field | | | | | | | | |
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| City, State, Zip | Menlo Park, CA | 94025 | | . | | | | | |
| Country | U.S.A. | | | Telep | obone | 650-327-3 | 400 F | acsimile | 650-327-3231 |
| believed to be true; punishable by fine | at all statements made and further that these or imprisonment, or to patent issued thereon. First Inventor: | statemer oth, unde | *** ****** | mode unth fl | ne knowiedo | e inar williu | I Taise State | inches and the h | Dr 20 Hitter me |
| Giv | en Name (first and m | iddle (if a | ıny]) | | | F | amily Nam | e or Surname | |
| Mark | | | | | Akeson | | | | |
| Inventor's | | | | | <u></u> | | | Date | |
| Signature Residence: City | Santa Cruz | | State | CA | Country | U.S.A. | | Citizenship | U.S.A. |
| Post Office | 300 Candy Lane | | L | | L | <u> </u> | | | |
| Address City | Santa Cruz | State | CA | Zip | 95060 | , | Country | U.S.A. | |
| - 45 | I Y | | l | | | | | | |
| Name of Second | ven Name (first and n | iddle (if | (Ivns | | 1 | 1 | Family Nan | ne or Surname | · |
| | ven Name (1851 and 1 | | | <u></u> | Vercoute | | <u>.</u> | | |
| Wenonah | | | | | Vercount | | | Date | 1 |
| Inventor's Signature | | | T 54-40 | 104 | Country | U.S.A. | | Citizenship | U.S.A. |
| Residence: City | Santa Cruz | | State | CA | Country | U.S.A. | | | 2 3 100 11 |
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| Name of Third | Inventor: | | ·- | | | | | | |
| Gi | ven Name (first and I | niddle (if | any]) | | | | Family Na | me or Surname | |
| David | | A | | | Haussler | • | | | |
| Inventor's Signature | Da | -d | 口 | ans | slen | _ ر | | | 7,2002 |
| Residence: City | Santa Cruz | | State | CA | Country | U.S.A. | | Citizenship | U.S.A. |
| Post Office Address | 402 Nobel Dr. | | <u></u> | | | | | | |
| Addiess | Courte Cour | State | ICA | Zip | 95060 | | Country | U.S.A. | |

Page 2 of 2

| Gi | ven Name (first and | middle [if | any]) | | | Family 1 | lame or Surname | |
|-------------------------|---------------------|------------|-------|-----|-----------|----------|-----------------|--------|
| Stephen | | | | | Winters-l | Hilt | | |
| Inventor's Signature | | | | | | | Date | |
| Residence: City | Santa Cruz | | State | CA | Country | U.S.A. | Citizenship | U.S.A. |
| Post Office Address | 209 Koshland | | | | | | | |
| City . | Santa Cruz | State | CA | Zip | 95064 | Count | y U.S.A. | |



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_X_Declaration

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|---|-------------------------|-------------------------------------|--------------------------|-----------------------------------|-------------|--|--|
| | · | | | YES | NO. | | |
| | | | | J. 3 . 7 | | | |
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| 60/253,393 | | | November 2 | 7, 2000 | | | |
| I hereby claim the benefit under 35 U.S.C designating the United States of America, | | es application(s), or 365(c) | | mational applicat Parent Patent N | | | |

| | | | | | | | | Atty I | Okt No. UCAL-19 | | | |
|--|----------------------|---------------------------------------|--------|----------------|------------------------|---------|------------------------|--------------|--|--|--|--|
| | | DIR | ECT AI | L COR | RESPON | DENCE ? | ro: | | | | | |
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| Country | U.S.A. | U.S.A. | | | Telephone | | 3400 F | acsimile | 650-327-3231 | | | |
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| Given Name (first and middle [if any]) | | | | | | | Family Name or Surname | | | | | |
| Mark | | | | | Akeson | | | | | | | |
| Inventor's | | | | | | | | Date | | | | |
| Signature Residence: City | Santa Cruz | ta Cruz State CA Country U.S.A. | | | Citizenship | U.S.A. | | | | | | |
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| Name of Second | Inventor: | · · · · · · · · · · · · · · · · · · · | | | | | | | | | | |
| | en Name (first and m | iddle [if | anvl) | | <u> </u> | | Family Nam | e or Surname | | | | |
| Wenonah | | | | | Vercoutere | | | | | | | |
| Inventor's | | | | | | Date | | | | | | |
| Signature | Wenn | Wenonah Vercouter | | | | | | Feb 20,200 | | | | |
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| Given Name (first and middle [if any]) | | | | | Family Name or Surname | | | | | | | |
| David | | | | | Haussler | | | | | | | |
| Inventor's Signature | | | | | | | | Date | | | | |
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Country

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| Given Name (first and middle [if any]) | | | | | | Family Name or Surname | | | | | |
| Stephen | | | | | Winters-Hilt | | | | | | |
| Inventor's Signature | | | | | . | - | | Date | | | |
| Residence: City | Santa Cruz | | State | CA | Country | U.S.A. | | Citizenship | U.S.A. | | |
| Post Office Address | 209 Koshland | · · · · · · · · · · · · · · · · · · · | | | | | | | | | |
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